NOTE ON THE SLIMY COATINGS OF CERTAIN BOLTENIAS IN PORT JACKSON.

BY R. VON LENDENFELD, PH.D.

A stalked solitary Ascidian, somewhat like Boltenia australis, which grows in depths between 6 and 10 fathoms in Port Jackson is characterised by its slimy surface. The pale brick-red colour of the outer surface of the slimy body of the cellulose mantle is similar to that of the stalk which does not appear slimy.

Expecting to find gland cells in the cellulose mantle I made sections which, however showed, that this slimy coating is nothing else than the ova of the Ascidian which cover the outer surface of it with a layer about 2 mm. in thickness.

These ova are surrounded by follicula, which consist of prismatic cells about three times as high as broad. The follicle-wall, consisting of a single layer of these cells, is as thick as the diameter of the spherical transparent ovum. As in other Ascidians these follicle-cells are filled with highly refractive granules, and there seems to be little doubt that these granules are nothing else than a muceous substance which is pressed forth when the Ascidian is touched, and then appears as that slippery slime which covers the parts of the surface which are coated with ova only, and is not met with on the stalk where the ova are absent. Out of the breeding season these Ascidians are ordinary, not slimy Boltenias.